External Document - Adding more AWS accounts to Azure AD SAML authentication

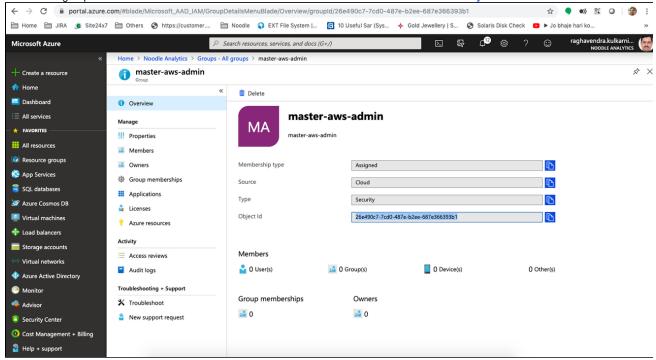
Please refer to the document before starting: https://docs.microsoft.com/en-us/azure/active-directory/saas-apps/aws-multi-accounts-tutorial

This page will drive through adding more AWS accounts to this process.

- Download the metadata file from the Azure portal: Azure AD Connect >> Enterprise Applications >> Amazon Web Services (AWS)
 >>Single Sign-on >> Click Download next to Federation Metadata XML
- · Log into the AWS account which needs this integration with local IAM user and MFA or root account in worst case
- Navigate to IAM service >> Identity providers
- Create Provider >> Provider Type >> SAML >> Name WAAD >> Metadata File >>Next Step >> Create
- Navigate to Roles >> Create Role >> SAML 2.0 federation >> SAML Provider WAAD >> Allow programmatic and AWS Management Console access >> Next: Permissions >> Search Administrator Access & Check Box >> Next: Tags >> Key: Name, Value:XXXX-aws-admin where XXXX is the account name all in lower case >>Next:Review >> Role Name: XXXX-aws-admin and Description also same >>Create Role
- Similarly create remaining other roles like XXXX-finance-admin, XXXX-read-only-user, XXXX-devops-user, XXXX-tpm-user with different
 policies to be attached. Later also these role policies can be changed as per requirements per AWS account but its always better to keep
 same policies for each role across the AWS accounts
- Once done, please make a note of account ID for that AWS account either from EC2 properties or IAM dashboard as highlighted below:



- Now login to Azure Portal and navigate to Groups: https://portal.azure.com/#blade/Microsoft_AAD_IAM/GroupsManagementMenuBlade/ AllGroups
- · Create new groups with the same name as that of IAM Roles created earlier and note down the Object Ids of these :



- Once all these groups are created and Object IDs are noted down, login to Microsoft Graph Explorer: URL
- Select GET >> beta >> https://graph.microsoft.com/beta/servicePrincipals/750b8f24-1b2d-491f-8f12-34e1028513ac >> Run Query
- Please note that the above link has Service Principal of the existing AWS Application from Azure AD, if the result fails then this ID might have changed
- DONOT use DELETE option from the menu, this will remove entire AWS Enterprise application from your Azure Subscription with only the App registration entry left behind
- Ideally in the Response Preview it shows the Manifest of the application with all the details:
- Now add the below section in the Request Body, making necessary changes to the content as per above details like AD group name, group ID, SAML provider ID

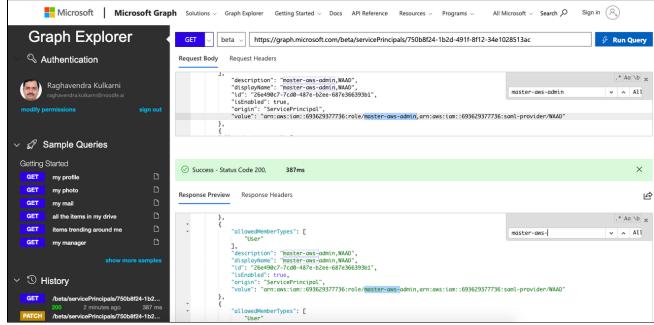
```
{
    "allowedMemberTypes": [
        "User"
],
        "description": "nw-devops-user,WAAD",
        "displayName": "nw-devops-user,WAAD",
        "id": "b361ae96-ccd7-471a-a7cc-88153788131f",
        "isEnabled": true,
        "origin": "ServicePrincipal",
        "value":
"arn:aws:iam::512088425928:role/nw-devops-user,arn:aws:iam::5120884
25928:saml-provider/WAAD"
    }
}
```

• Duplicate this as many times based on number of AD groups created with, between the second to fourth flower bracket closure and leave the last one without, Example below is for XXXX account where only 2 roles and ad groups were created.

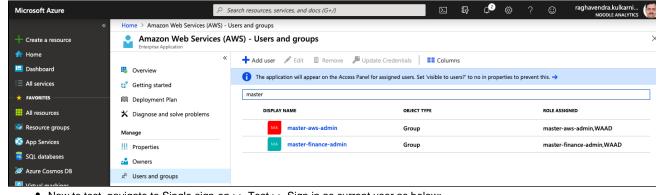
Replace the name to the role/AD group names that were created for this AWS account, id to be replaced with the Object ID of the AD group that we created and also account number should also be updated as below:

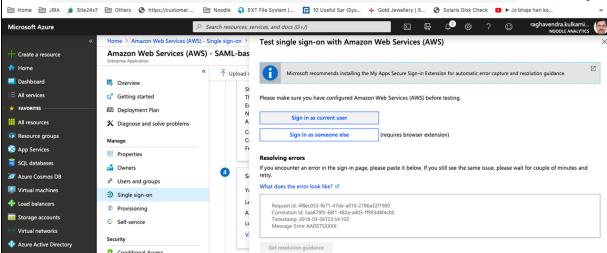
```
{
        "allowedMemberTypes": [
            "User"
        ],
            "description": "master-aws-admin, WAAD",
            "displayName": "master-aws-admin,WAAD",
            "id": "26e490c7-7cd0-487e-b2ee-687e366393b1",
            "isEnabled": true,
            "origin": "ServicePrincipal",
            "value":
"arn:aws:iam::ACCOUNTID:role/master-aws-admin,arn:aws:iam::ACCOUNTI
D:saml-provider/WAAD"
        },
        "allowedMemberTypes": [
            "User"
        ],
            "description": "master-finance-admin, WAAD",
            "displayName": "master-finance-admin,WAAD",
            "id": "8181dec7-1b39-4df3-9cc1-736af2cf5704",
            "isEnabled": true,
            "origin": "ServicePrincipal",
            "value":
"arn:aws:iam::ACCOUNTID:role/master-finance-admin,arn:aws:iam::ACCO
UNTID:saml-provider/WAAD"
        }
```

- · Double check id of the role/group to the Object id from Azure AD Group properties, account ID and names of the roles
- Once verified, copy this content in the Graph Explorer Request Body appending next to the section from where it was copied from. Make sure there is proper, and json validation done
- Now Select Patch >> beta >> same URL with Service principal >> Run Query
- Now Select Get >> beta >> same URL with Service principal >> Run Query and verify that the new entry has come in the response body, as below:

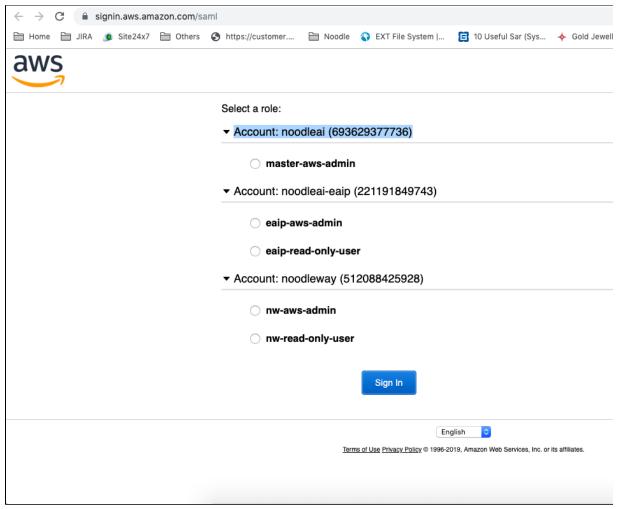


- Ideally this should return Success, it fails it will show error message which may be like miss placed comma or object id clash/duplicate or name duplicate, hence the previous step verification is very much important
- Once its Success here, navigate to AWS Application in Azure AD: https://portal.azure.com/#blade/Microsoft_AAD_IAM/ManagedAppMen uBlade/Users/objectld/750b8f24-1b2d-491f-8f12-34e1028513ac/appld/671e788b-fb2e-4bbb-a946-02305ced415f/menuItemId/QuickStart and go to Users and Groups
- · Make sure that there is no entry of the Role Assigned that you are trying for the AWS account
- Click Add User >>Users and Groups >> Select and search for the group name >> under Role also select the same Name and click on Assign
- Repeat the same for other groups created for this account and make sure that group is assigned with same name Role ex. below:





· This should now show the account that you have configured (highlighted below) with ONLY those groups which you are part of:



• Select the newly added AWS account and Role to login and confirm that all the configurations are successful